			7F1-10C			
QUERY CONTR	OL FORM		· · · · · · · · · · · · · · · · · · ·		RTIS US	SE ONLY
Application No.	101046.	071	Prepared by	()B	Tracking Number	5989841
Examiner-GAU	Soonen-	1723	Date	912/104	Week Date	8/2/154
			No. of queries	1	16-Use IF	W

	J	ACKET	
a. Serial No.	f. Foreign Priority	k. Print Claim(s)	(p. PTO-1449)
b. Applicant(s)	g. Disclaimer	I. Print Fig.	q. PTOL-85b
c. Continuing Data	h. Microfiche Appendix	m. Searched Column	r. Abstract
d. PCT	i. Title	n. PTO-270/328	s. Sheets/Figs
e. Domestic Priority	j. Claims Allowed	o. PTO-892	t. Other

SPECIFICATION	MESSAGE
a. Page Missing	PTO-1449: Please either initial or line through atations copy provided for reference.
b. Text Continuity	through atations may provided for reference
c. Holes through Data	3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3
d. Other Missing Text	
e. Illegible Text	
f. Duplicate Text	
g. Brief Description	
h. Sequence Listing	
i. Appendix	
j. Amendments	
k. Other	
CLAIMS	
a. Claim(s) Missing	
b. Improper Dependency	
c. Duplicate Numbers	Thamyou
d. Incorrect Numbering	initials IB
e. Index Disagrees	RESPONSE
f. Punctuation	
g. Amendments	
h. Bracketing	
i. Missing Text	
j. Duplicate Text	
k. Other	
	initials

FORM F10-1440	
PATENTS AND OTHER PROPERTY OF THE PROPERTY OF	ITEMS FOR APPLICANT'S SURE STATEMENT

270/219 10/046,071

APPLICANT:
O'CONNOR, Stephen D. et al.

ATTY. DOCKET NO.

(Use several sheets if necessary)

FILING DATE: GROUP: 1/3 00

SERIAL NO.

EXAMINER	·	U.S. P	ATENT DOCUMENTS			
EXAMINER INITIALS	DOCUMENT NUMBER	DATE	NAMÈ	CLASS	SUB CLASS	FILING DATE
A	.1 6,537,506 B1	3/25/2003	Schwalbe et al.	422	130	2/3/2000
A	2 2002/0192701 A1	12/19/2002	Adey	435	6	8/2/2002
A	3 6,494,614 B1	12/17/2002	Bennett et al.	366	336	9/21/1999
	4 6,482,306 B1	11/19/2002	Yager et al.	204	600	9/22/1999
A	5 6,409,832 B2	6/25/2002	Weigl et al.	117	206	3/30/2001
	.6 2002/0076350 A1	6/20/2002	Weigl et al.	422	58	9/18/2001
A	.7 2002/0048535 A1	4/25/2002	Weigl et al.	422	100	9/18/2001
A	8 2001/0048900 A1	12/6/2001	Bardell et al.	422	100	5/23/2001
A	9 2001/0048637 A1	12/5/2001	Weigl et al.	366	341	5/24/2001
A1	0 6,287,520 B1	9/11/2001	Parce et al.	422	100	1/21/2000
A1	1 6,235,471 B1	5/22/2001	Knapp et al.	435	6	4/3/1998
A1	2 6,193,471 B1	2/27/2001	Paul	417	53	6/30/1999
A1	3 6,186,660 B1	2/13/2001	Kopf-Sill et al.	366	340	7/26/1999
A1	4 5,945,203	8/31/1999	Soane	428	209	10/14/1997
A1	5 5.932,799	8/3/1999	Moles	73	53.01	7/21/1997
. A1	6 5,932,315	8/3/1999	Lum et al.	428	172	4/30/1997
A1	7 5,904,824	5/18/1999	Oh	204	601	3/7/1997
A1	8 5,882,571	3/16/1999	Kaltenbach et al.	264	400	3/27/1997
A1	9 5,882,465	3/16/1999	McReynolds	156	285	6/18/1997
A2	0 5,872,010	2/16/1999	Karger et al.	436	173	7/3/1996
A2	1 5,849,208	12/15/1998	Hayes et al.	216	94	9/7/1995
A2	2 5,658,515	8/19/1997	Lee et al.	264	219	9/25/1995
A2	3 5,640,995	6/24/1997	Packard et al.	137	597	3/14/1995
A2	4 5,545,367	8/13/1996	Bac et al.	264	401	5/27/1993

EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant

Information Disclosure Statement - Section 9 PTO-1449

FORM PTO-1449 ATTY. DOCKET NO. SERIAL NO. 270/219 10/046,071 APPLICANT: O'CONNOR, Stephen D. et al. FILING DATE: January 11, 2002 1723

EDG///	U.S. PATENT DOCUMENTS						
EXCHINER INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
	A25	5,443,890	8/22/1995	Öhman	428	167	2/4/1992
-	A26	5,385,709	1/31/1995	Wise et al.	422	98	6/24/1993
	A27	5,376,252	12/27/1994	Ekström et al.	204	299 R	11/10/1992
-	A28	5,230,866	7/27/1993	Shartle et al.	422	103	3/1/1991
	A29	5,222,808	6/29/1993	Sugarman et al.	366	274	4/10/1992
	A30	5,194,133	3/16/1993	Clark et al.	204	299 R	5/3/1991

FOREIGN PATENT DOCUMENTS							
EXAMINER INITIALS		DOCUMENT NUMBER	DATE	COUNTRY	NAME	TRANS YES	ATION? NO
	Bl	WO 02/10732 A1	2/7/2002	WIPO	Ausserer et al.		
	B2	WO 00/22436	4/20/2000	WIPO	McNeely et al.		
	В3	WO 00/21659	4/20/2000	WIPO	Burdon et al.		
	B4	EP 0 933 126 A1	8/4/1999	EPC	Winkler et al.		
	B5	WO 99/17093	4/8/1999	WIPO	Handique et al.		
	В6_	EP 0 107 631 A2	5/2/1984	EPC	Ruzicka et al.		

EXAMINER INITIALS		NON PATENT LITERATURE DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)
	C1	Stroock, Abraham D. et al., "Chaotic Mixer for Microchannels," Science Magazine, Vol. 295, pp. 647-651, January 25, 2002
	cz	Liu, Robin H. et al., "Plastic In-Line Chaotic Micromixer for Biological Applications," Micro Total Analysis Systems, J.M. Ramsey and A. van den Berg (eds.), 2001 Kluwer Academic Publishers, The Netherlands, pp. 163-164
	C3	Jacoby, Mitch, Chemistry Flows Like Clockwork - Flow system used to make simple devices for time-dependent studies, "Chemical & Engineering News," February 24, 2003, p.5
	C4	Deshmukh, Ajay A. et al., A.P. (2000), "Continuous Micromixer with Pulsatile Micropumps," Solid-State Sensor and Actuator Workshop, Hilton Head Island, SC, USA, 4-8 June 2000, pp. 73-76
	ය	Martin, P.M. et al., Laser micromachined and laminated microchannel components for chemical sensors and heat transfer applications, "Micromachined Devices and Components III," SPIE – The International Society for Optical Engineering, Vol. 3224, Bellingham, Washington, USA, pp. 258-265
	C 6	Tracey, M.C. et al., "Microfluidic Mixer Employing Temporally-Interleaved Liquid Slugs and Parabolic Flow," Micro Total Analysis Systems, J.M. Ramsey and A. van den Berg (eds.), 2001 Kluwer Academic Publishers, The Netherlands, pp. 141-142

Micro Total Analysis Systems, J.M. Ramse C6 Netherlands, pp. 141-142	y and A. van den Berg (eds.), 2001 Kluwer Academic Publishers, The
EXAMINER: To Soohoo	DATE CONSIDERED: 7-18-Zew4
EXAMINER: Initial if reference is considered, who	ether or not citation is in conformance with MPEP 609; and not considered. Include a copy of this form with

FORM PTO-1449	ATTY. DOCKET NO. 270/219	SERIAL NO 10/046,071		
OF BATENTS AND OTHER ITEMS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	APPLICANT: O'CONNOR, Stephen D. et al.			
O 0 (Spe several sheets if necessary)	FILING DATE: January 11, 2002	GROUP:	8/2 or	

1 1/2	<u></u>	
EXAMINER INITIALIE	a Tree	
	C7	Ehrfeld, W. et al., Potentials and Realization of Microreactors, "DECHEMA Monographs," Vol. 132, VCH Verlagsgesellschaft, 1996, pp. 1-28
	C8	Johnson, Timothy J. et al., Rapid Microfluidic Mixing, "Analytical Chemistry," Vol. 74, No. 1, January 1, 2002, pp. 45-51
	က	Verpoorte, Elisabeth M.J. et al., "Silicon-Based Chemical Microsensors and Microsystems," Interfacial Design and Chemical Sensing, American Chemical Society, 1994, Chapter 21, pp. 244-254
	C10	Yang, Xing et al., "A MEMS Thermopneumatic Silicone Membrane Valve," (1998) Sensors and Actuators A: Physical, Vol. 64, pp. 101-108
	CH	Schulte, Thomas, "The Development of Practical Microfluidic-Based Systems for Chemical and Blood Analysis," (1999) in Drug Discovery Technology for the New Millennium Chapter 13, pp. 127-135. Conference proceeding: IBC USA Conferences, Inc.: 4th Annual Conference on Microfabrication and Microfluidic Technologies
	C12	Becker, Holger et al., "Silicon as Tool Material for Polymer Hot Embossing," (1999) Proceedings MEMS '99 Orlando, 228-231
	C13	Jeon, Noo Li et al., "Large-Area Patterning by Vacuum-Assisted Micromolding," (1999) Adv. Mater. 11, No. 11:946-950
	C14	Jackman, Rebecca J., et al., "Electrochemistry and soft lithograph: A route to 3-D microstructures", (May 1999) Chemtech 18-30.
	C15	Folch, A., et al., "Molding of Deep Polydimethylsiloxane Microstructures for Microfluidics and Biological Applications" (Feb 1999) Journal of Biomechanical Engineering 121:28-34.
	C16	Duffy, David C., et al., "Rapid Prototyping of Microfluidic Systems in Poly(dimethylsiloxane)", (Dec 1998) Analytical Chemistry 70:4974:4984.
	C17	Grzybowski, B. A., et al., "Generation of Micrometer-Sized Patterns for Micranalytical Applications Using a Laser Direct-Write Method and Microcontact Printing", (Nov 1998) Analytical Chemistry 70:4645-4652.
	C18	Gonzalez, C., et al., "Fluidic interconnects for modular assembly of Chemical Microsystems", (Jan 1998) Sensors and Actuators B 49:40-45.
	C19	Qin, Dong, et al., "Microfabrication, Microstructures and Microsystems", (1998) Topics in Current Chemistry 194:1-19.
	C20	Fuhr, G., et al., "Biological Application of Microstructures", (1998) Topics in Current Chemistry 194:83-116.
	C21	Cordova, Emilio, et al., "Noncovalent Polycationic Coatings for Capillaries in Capillary Electrophoresis of Proteins" (April 1997) Analytical Chemistry 69:1370-1379.
	C22	McCormick, Randy M., et al., "Microchannel Electrophoretic Separations of DNA in Injection-Molded Plastic Substrates" (Dec 1997) Analytical Chemistry 69:2626-2630.
	C23	Martynova, Larisa et al., "Fabrication of Plastic Microfluid Channels by Imprinting Methods" (1997) Anal. Chem. 69:4783-4789.
	C24	Kovacs, Gregory T.A., et al., "Silicon Micromachining Sensors to Systems" (July 1996) Analytical Chemistry News & Features 407A-412A.
	C25	Shoji, Shuchi, et al., "Microflow Devices and Systems" (Oct 1994) J. Micromech. Microeng. 4:157-171.
	C26	Schomburg, W.K., et al., "Microfluidic Components in LIGA Technique" (Feb 1994) J. Micromech. Microeng. 4:186-191.
	C27	Verpoorte, Elisabeth M.J., et al., "Three-Dimensional Micro Flow Manifolds for Miniaturized Chemical Analysis Systems" (Oct 1994) J. Micromech. Microeng. 4:246-256.

EXAMINER: To See hos	DATE CONSIDERED: 7-15-2014
EXAMINER: Initial if reference is considered, whether Draw line through citation if not in conformance and remains a communication to applicant	or or not citation is in conformance with MPEP 609; not considered. Include a copy of this form with